

Challenges in teaching Islamic education and requirements of the development of Islamic cognitive domains

Hafizhah Zulkifli¹, Ahmad Munawar Ismail², Nurul Asiah Fasehah Muhamad³, Nur Hanani Hussin⁴, Hifdzi Zaim Zamri⁵

¹Faculty of Education, National University of Malaysia, Bangi, Malaysia

²Faculty of Islamic Studies, National University of Malaysia, Bangi, Malaysia

³Faculty of Quranic and Sunnah Studies, Islamic Science University of Malaysia, Nilai, Malaysia

⁴Islamic Education Division, Ministry of Education Malaysia, Cyberjaya, Malaysia

⁵Institute of Islam Hadhari, National University of Malaysia, Bangi, Malaysia

Article Info

Article history:

Received Nov 7, 2024

Revised Jun 18, 2025

Accepted Jul 9, 2025

Keywords:

Bloom's taxonomy

Challenges

Islamic cognitive model

Islamic education

Requirements

ABSTRACT

Bloom taxonomy that has long been used in Islamic education is no longer adequate to achieve the goal of Islamic education. The exploration of cognitive domain in the perspective Islamic education needs to be explored so that it can be used as a reference in enhancing the quality of teaching and assessments. This research aims to understand the challenges faced by teachers in Islamic education and to explore the need to develop Islamic cognitive domains. A qualitative method of research is applied by conducting a semi structured interview with four informants with teaching experience between 20 to 32 years of teaching Islamic education. The findings show that seven theme challenges in teaching and learning Islamic education, for instance, lack of *adab* (values), not appropriate for Islamic culture, Bloom's taxonomy not equivalent to the curriculum document standard and assessment, deficiency in understanding lesson content, time constraints, deficiency of professional judgement skills, and lack of continuous assessment. There is need to construct a taxonomy in Islamic education with these cognitive elements to be considered as elements in the taxonomy which are internalizing, analysis, gratefulness, habituation, sincerity, implementing, consistency, and reflecting.

This is an open access article under the [CC BY-SA](#) license.



Corresponding Author:

Hafizhah Zulkifli

Faculty of Education, National University of Malaysia

43600 Bangi, Selangor, Malaysia

Email: hafizhah_zulkifli@ukm.edu.my

1. INTRODUCTION

The majority of education all over the world used Bloom's taxonomy either in the classroom or during the assessment. Malaysia's education system also is based on the curriculum and assessment standard document that uses Bloom's taxonomy as a basic guide for teaching and learning. During teaching and learning using Bloom's taxonomy some obstacles can be questions such as Bloom's taxonomy lower level was remembering, however in Islamic education, especially in remembering our Quran is not in the lower level. Besides, there is a problem integrating the cognitive, affective, and psychomotor in Islamic education.

Taxonomy has a variety of meanings, such as the science of classification, which involves knowledge, methods, and principles covering the classification of objects, language elements according to hierarchical relationships, and sequences of phonological or grammatical combinations that are likely to become a language unit. Taxonomy can also be understood as the hierarchical classification of something or

the principle underlying the classification [1]. According to McKelvey [2], taxa can be defined as a hierarchy, with fewer and fewer characters as essentialists classified taxonomy at the family rank with five characters in common and also denotes a specific degree of inclusiveness within a category [3].

There were several new taxonomies are drawing increased attention among scholars in education. Previous literature shows that there is a spiritual quotient that has several impacts on students learning outcome from Sufism (*tasawwuf*) perspective which has the dimension of repentance (*taubat*), piety (*wara*), asceticism (*zuhud*), trust in God (*tawakkal*), remembrance of God (*zikr*), spiritual seclusion (*khalwat*), sincerity (*ikhlas*), and contentment (*rida*). This taxonomy will help students understand God better, prioritize their conscience to solve problems in life and the learning process [4]. Other studies have paved the way for exploration on discussing how to change the hierarchy of Bloom's taxonomy, such as Anderson's taxonomy, extend Bloom's taxonomy, such as in mathematics subjects, so-called Wilson's taxonomy that separated mechanics, which he called a practical science [5], develop new taxonomy, namely Solo's taxonomy [6]. Based on the literature, Bloom, Anderson, and Wilson's taxonomy was found to be insufficient in the metacognition part of some students.

In addition, the study on Islamic education learning taxonomy and the development of 'aql or brain in Al-Quran from the perspective of neuroscience shows that taxonomic learning in Islamic education can be developed by synthesizing neuro-theology, neuro-philosophy, and neuro-education in an integrative manner and is more complex than Bloom's taxonomy, which only focuses on cognitive aspects [7]. Shoukat and Waheed [8] findings showed that Bloom's taxonomy theory cannot reach the level of metaphysical issues such as the field of belief. The process of applying Bloom's taxonomy to the learning practice of Islamic education certainly needs to be assessed and analyzed at the level of its needs and characteristics so that the worship ('*aabid*) personality expected from Islamic education can be achieved. Explicitly, the elements of teaching in the explanation of Al-Quran verses seem relevant to the empirical practice of the domain in Bloom's taxonomy theory. However, ontologically, it involves transcendental metaphysical issues, for example, faith (*aqidah*), Islam, and spiritual excellence (*ihsani*) that must be developed into the affective domain of learning. It seems that Bloom's theory does not reach them when compared to the breadth and depth of the scope and sequence of domains in the elemental teaching of the content of the Quran.

As a result of the weak aspects of the scope and sequence of Bloom's taxonomy, it is necessary to make Islamic religious learning implementers aware of the need to more maturely consider the use of Bloom's taxonomy in teaching elements that contain the affective domain of transcendence. The findings of this study are the classification concept of the level of ability to achieve learning objectives in the affective domain of Quran taxonomy, which consists of the domain of faith, consisting of levels of belief (*lil I'tiqady*) and acceptance (*littalaqy*); Islamic domain, consisting of the level of intention to respond (*niyyat al rad*), organization (*tandzim*), and actualization (*tahqiq*); and spiritual excellence (*ihsani*) domain, consisting of the level of sincerity (*al Ikhlas*) and supervision (*al muraqabah*).

The past research does not address the challenges of Bloom taxonomy as they focus on building or creating new or extending Bloom taxonomy. It also does not consider in-depth interviews to see the reality experience by teachers that have been teaching and learning using Bloom taxonomy. From observing the teacher, the need to further exist to best understand what are the challenges in teaching Islamic education using Bloom taxonomy. Next, the methodology used in prior research concentrated on document analysis and thematic analysis [5]. Very few used qualitative methods involving interviews and observations. Hence, this study fills the gap by using qualitative methods concerning interviews and document analysis. Based on the problems and gap, the purpose of this study is to understand the challenges faced by teachers in Islamic education and propose a framework for Islamic cognitive domains. It hopes that the teacher can better understand the teaching and learning and prepare for the solution in any circumstances.

2. LITERATURE REVIEW

There are also challenges to the readiness of Islamic education teachers to implement the independent curriculum in middle school including aspects of planning, implementation, and evaluation, and lack of optimal synergy and cooperation [9]. Furthermore, the results of previous studies [10], [11] found that teachers do not have in-depth information on the content of the subjects they specialize in, time constraints, lack of rural facilities, and student attitudes. Overall, the study found that Islamic education teachers are still practicing the old paradigm in all components, especially the dependence on traditional materials such as textbooks and blackboards and teacher-centered methods, and need a new taxonomy [12]. There are also studies on the attitude of Islamic education teachers towards the use of social media in teaching and learning at a higher level and some challenges have a neutral level such as the teacher's inability to distinguish between academic and personal topics when using social media and weak interaction between student and teacher when using social media [13].

According to Uiboleht *et al.* [14], teachers' concern to identify student differences will ease the learning process. This is because the teacher's understanding of the diversity of student backgrounds helps the teacher plan appropriate strategies and approaches to optimize the success of a lesson. Students who are not interested in learning will not be able to achieve their desires and ambitions [15]. Studies related to students with disciplinary problems found that the majority of students have a moderate level of motivation and interest in learning [16].

In addition, the low technology skills among senior teachers cause them to feel burdened and opt for teacher-centered teaching. In addition, a study by Fanani *et al.* [9] suggests that the use of mobile technology is carried out comprehensively in all primary and secondary schools in the state of Johor. The use of mobile technology can help teachers teach easily and adhere to the curriculum document standard and assessment, as well as be in line with the school textbooks that have been set by the Malaysian Ministry of Education as the main reference.

Next, Islamic education syllabuses in secondary and primary schools do not have a balance between the intellectual, moral, and spiritual dimensions. It was found that a large focus was given to the cognitive and ritual dimensions of ethics (*adab*), worship (*ibadah*), and Islamic jurisprudence (*fiqh*), which sidelined the affective and spiritual aspects. In the aspect of Quran literacy, an excessive amount is given to recitation but less to meaning and understanding [17].

3. METHOD

This study uses a qualitative approach with a case study design to understand the phenomena that occur naturally [18]. This design coincides with the research question what are the to explore the challenges faced by teachers in implementing the curriculum and assessment of standard documents, as well as the need to construct a taxonomy in Islamic education. Purposive sampling techniques were used in selecting the study participants to ensure that the data collected was rich and in-depth enough to explain the phenomenon being studied.

Among the criteria set is that the study participants consist of excellent teachers in Islamic education who serve in secondary schools and have teaching experience using the integrated curriculum in secondary school and standard curriculum in secondary school curriculum. Therefore, the selection of participants for this study began by referring to individuals with the authority to source the information regarding the participants who meet the criteria. Four teachers have been selected for this study. The details of the study participants' information are shown in Table 1.

Table 1. Participants' information

Informant	Teaching experience	Higher education
1	32 years	Degree–National University of Malaysia
2	20 years	Degree–Yarmouk University
3	29 years	Degree–National University of Malaysia
4	31 years	Degree–Malaya University

This study uses semi-structured interviews and document analysis for data collection. The interview protocol instrument was built as a guide for the researcher to obtain structured research findings. To ensure the development of a quality interview protocol, Shoozan and Mohamad [19] describes the application of the interview protocol refinement (IPR) Framework to refine the interview protocol. There are four main phases, and the objectives in each phase are detailed in Table 2.

Table 2. IPR framework phases

Phase	Detail	Purpose
1	Ensuring the interview questions match the research questions.	Building a mapping matrix of the interview questions to align with the research question.
2	Designing interview questions in an inquiry-based conversation.	Forming interview questions using 4W 1H.
3	Receiving feedback from the interview protocols.	Checking the validity of the interview questions.
4	Conducting pre-field research.	Ensuring that the research questions can be understood by the participants.

Thematic analysis approaches typically acknowledge the potential for inductive (data-driven) and deductive (theory-driven) orientations to coding, capturing semantic (explicit or overt) and latent (implicit, underlying) meanings, processes of coding and theme development, and the potential for some flexibility

around the theory that frames the research [20]. This thematic data analysis helps the NVivo 14 application as a tool to organize data in a systematic and organized manner. Codes or topics that are more descriptive can evolve into more interpretative themes. These themes may be combined to form larger themes, leading to higher levels of interpretation and abstraction, to answer the research questions, which are: i) naming the categories; ii) determining the number of categories; and iii) figuring out systems for placing data into categories.

To increase the credibility and consistency of the research data, a member check process was used, which means that each research participant was allowed to confirm the interview transcripts and the initial findings of the research data made by the researcher. Study participants have the right to modify and reject if they do not agree or if there is an inconsistency between the transcript and the initial findings of the study. Once the improvements were made, the study participants signed the confirmation form provided.

Next, the peer review process was also carried out to confirm the results of the data findings, starting from the beginning of the analysis process, for example, open coding with an initial review made by appointed experts until the final review after the themes were formed. It aims to ensure that the themes can answer the research questions. And finally, the triangulation process was carried out, which is triangulation from the sources of data collection methods (interviews and document analysis) to strengthen the findings of the study.

4. RESULTS AND DISCUSSION

4.1. Results

The findings are mainly divided into three parts. Part A focuses on the challenges faced by teachers in conducting their teaching and learning sessions in Islamic education. Part B discusses the reasons for developing an Islamic cognitive domain. Lastly, part C addresses the elements that need to be included in the Islamic cognitive domains.

4.1.1. Part A

There were seven challenges in teaching and learning Islamic education, for instance, lack of *adab* (values) in implementing Bloom's taxonomy, Bloom's taxonomy not appropriate for Islamic culture, Bloom's taxonomy not equivalent to the curriculum document standard and assessment, deficiency in understanding lesson content, time constraints, deficiency of professional judgment skills, and lack of continuous assessment.

a. Theme 1: lack of *adab* (values) in Bloom's taxonomy

All of the informants agreed that Bloom's taxonomy does not focus on *adab* or *akhlak* (values) in cognitive domains. In Islamic education, values are an essential part of living in peace and harmony. However, when implementing the teaching with Bloom's taxonomy, values were missing. For academic achievement, Bloom's taxonomy achieved the learning objective. The expressions of the participants are as:

"Bloom's taxonomy does not emphasize the importance of good character in life. Islamic education needs to be implemented in a way that knowledge can be practiced in life, not just by understanding it. This is what differentiates Bloom's taxonomy from Islamic education."

b. Theme 2: Bloom's taxonomy is not appropriate for Islamic culture

Informants 1, 3, and 5 claim that Bloom's taxonomy cannot cater to the culture of Islamic culture because, in Islam, we believe in the world and hereafter, and we also need the spiritual instead of the cognitive. They excerpt as:

"Bloom's taxonomy is not suitable to be used because the outcome of Islamic education is different. Islam emphasizes both aspects of this world and the hereafter. We don't want to produce students who can only be excellent in academics. We teach Islamic education not only for them to pass their exam but also to nurture faith in their lives."

c. Theme 3: Bloom's taxonomy is not equivalent to the curriculum document standard and assessment

According to informants 2 and 5, they feel that the curriculum document standard and assessment are not in line with Bloom's taxonomy. Hence, they feel it is difficult to teach as it cannot achieve the learning objectives. The excerpt reads as:

"...student can reach band 6. Can the student practice? Can the student live with what we teach? Bloom does not have the elements of appreciation, but in our curriculum document standards and assessment exist. It means there is no parallel between Bloom and curriculum document standard and assessment."

d. Theme 4: deficiency in understanding lesson content

- Subtheme 1: curriculum and assessment standard document

Informants 1, 3, and 4 consent that there is a deficiency in understanding the lesson content. The lesson content includes the curriculum, assessment standard document, and textbook. The authors conclude that the prior document called the integrated curriculum secondary school, has a lot of information, while the latter, which is the curriculum and assessment standard document, only gives basic information. For instance, informant 4 said that:

“It is different from the curriculum and assessment standard document; the content is different. Like this integrated curriculum in secondary school, there is much information and depth. The students’ learning varies widely. When it becomes a curriculum and assessment standard document, the title seems to be basic and data-only. For example, the topic of muamalat, integrated curriculum secondary school is more in-depth in giving information, but curriculum and assessment standard document students only need to know the meaning of muamalat and its characteristics.”

It is different from informants 2 and 4 who agree that the curriculum and assessment standard document are simpler and more suitable nowadays, as she claims in the excerpts.

“The new one is good. Because it is simple but compact...if the student wants more details about the topic, they can Google it or they will learn it from an expert. For example, they can learn it when they enter university and join the courses.”

Next, the informant stated that there is a serious problem when teachers do not understand the curriculum and assessment standard document and several the teacher do not understand that as she quotes:

“Some Islamic education teachers still don’t understand the objectives that have been outlined in the curriculum and assessment standard document. If we follow what has been outlined in the curriculum and assessment standard document, we can surely build a generation that has been described in the curriculum and assessment standard document. But unfortunately, there are still some teachers who don’t read the curriculum and assessment standard document thoroughly.”

- Subtheme 2: text book

Regarding the textbook syllabus that is being used by the teachers, informants 1, 3, and 5 stated that the textbook syllabus for integrated curriculum secondary school is much briefer with short explanations compared to the previous curriculum, which is the integrated curriculum secondary school. This becomes a challenge for Islamic education teachers because they need to put extra effort into finding more information regarding the topic they want to teach. For instance, informant 5 stated that:

“In my opinion, the textbook syllabus from the previous integrated curriculum secondary school curriculum is better explained and has more information regarding the topic. But the current curriculum and assessment standard document makes it hard for the teachers because we need to independently explore more about the syllabus through the QR code provided in the textbook for each topic.”

Next, there are also problems in the text book especially in *Jawi* writing. *Jawi* writing is an adaption from Arabic letters and several of the students cannot master *Jawi*. This is stated in the following passage:

“The problem with textbooks is that not all students understand Jawi writing. So, there has to be writing in the alphabet letter (Rumi). Because usually, students will not use textbooks. They will use a module by their teachers. This is why in the end Jawi doesn’t exist. We should make books for students to read instead of textbooks.”

e. Theme 5: time constraints

Next is the theme of time constraints. All informants in this regard, agreed to experience time constraints in teaching Islamic education. Informant 2 insisted that teachers are tied to various things other than teaching Islamic education, especially for the basic assessment of *Fardhu Ain* (worship to Allah). Informant 2 explained:

“When we want to do the basic assessment of Fardhu Ain, there is a variety of work to do such as the teacher needs to bring students to compete on nasyid, recite the Quran and tahfiz Quran. Even, we are burdened with teaching 40 students in the classroom and there is not enough time to concentrate.”

Informant 1 added that:

“Islamic education teachers are burdened with a lot of different responsibilities besides teaching. There are so many competitions for which students need to be trained and accompanied. Teachers are only given one hour to teach and conduct class assessments. It is impossible to assess all students within a short time.”

Informant 1 also stated that teachers need to make sure that the syllabus is covered in the allocated period. This is a challenge because it makes the assessment difficult to conduct properly, given the time to cover all the topics in the syllabus.

f. Theme 6: deficiency of professional judgement skills

Next, challenges arise when the informant cannot give the final assessment score fairly, and the informant also feels hesitant to give the score. According to some informants, they find it difficult to give good marks, such as in the following statements:

“... Here comes the feeling of favoritism. For students who are good with teachers, we give high marks. While the matter is not allowed, then the administrator said that the students must pass. It cannot be like this. For example, in memorizing the Quran, if the student doesn't memorize, he has to be given a zero score, which is for band 1.”

g. Theme 7: lack of continuous assessment

The final challenge is the lack of continuous evaluation. Informants are concerned that what has been learned at school is not practiced by students at home, and there is no monitoring from their parents. This was explained in the interview:

“The teacher doesn't just want to copy and give homework and practice. Homework must change. Homework must be done. Has the prayer been done five times a day? Then ask parents to tick and ask for a parent's signature or anyone at home. That you have implemented. But sometimes the parents do not care about it because of the working obstacles.”

“It is just that we do not judge near home. At school, we know that he has changed. For example, there used to be students who were naughty, but after teaching Islamic education, that changed. But at home, we do not know. The role of parents should be parallel.”

4.1.2. Part B

The five informants from the interview were asked if a new cognitive taxonomy for Islamic education was necessary to be developed. Four of the informants stated that it was necessary based on their reasons, which will be explained in this part. Meanwhile, one informant stated that it was not necessary to do so, for her reasons.

Informant 1 was one of the informants who agreed that there must be a new cognitive taxonomy for Islamic education that replaces Bloom's taxonomy. Informant 1 stated:

“I agree that there must be a new taxonomy that can assess holistically because Islamic education can never be assessed by only using Bloom's taxonomy. The new Islamic education taxonomy must encompass the assessment of all cognitive, affective, and psychomotor aspects.”

Informant 2 stated his agreement with developing a new cognitive taxonomy for Islamic education. He stated that this is important because Bloom's taxonomy does not include the aspects of faith or soul (*ruh*) in it, whereas in Islam, this is a huge component that a human being has to consider.

Informant 3 agreed on the development of a new cognitive taxonomy for Islamic education because of the lack of moral aspects in the Bloom taxonomy evaluation. Informant 3 stated:

“Bloom's taxonomy does not emphasize moral values and assessment. Islamic education is supposed to emphasize how students can apply and practice it consistently as a habit in their daily lives. Bloom's taxonomy is hard to apply in Islamic education because it lacks this aspect.”

Bloom's cognitive taxonomy only concerns the student mastering knowledge, but Islamic education emphasizes practical application of the knowledge in life."

Informant 4 also does not agree with Bloom's taxonomy because, in her opinion, the highest level of cognitive aspect that someone can reach is creation, and this is not applicable in Islamic education. For instance, informant 4 gave an example:

"The level of creation cannot be applied in ritual aspects of Islam such as hajj because ritual aspects cannot be created but must be followed and obeyed. Islam has its levels and the highest level of cognitive aspects that need to be developed."

Meanwhile, informant 5 gave a different perspective regarding the need to develop a cognitive taxonomy for Islamic education. Informant 5 disagreed that there should be a new cognitive taxonomy for Islamic education. Informant 5 stated that,

"We do not need to bother developing a new cognitive taxonomy. In my opinion, we just do not understand deeply what is in the curriculum document standard and assessment for the integrated curriculum secondary school. Whatever the challenges the teachers face, the curriculum document standard and assessment are enough to guide them in teaching Islamic education. They just need to understand and read the contents of the curriculum document standard and assessment."

4.1.3. Part C

The elements suggested by the informants of the current study are to be included in the development of a new cognitive taxonomy for Islamic education. These elements are suggested based on the Islamic principles of how cognitive aspects need to be developed for students to achieve the outcome of Islamic education. The elements were internalizing, analysis, gratefulness, habituation, sincerity, implementing, consistency, and reflecting.

a. Internalizing

From the five interviews conducted with the informants, all of them suggested the element of internalization as part of the new cognitive taxonomy for Islamic education. Informant 2 described internalizing as:

"The student understands the knowledge, applies the knowledge with full self-consciousness, and has a good appreciation for the practice being taught in class."

In addition, informant 4 said:

"That students need to understand and internalize the knowledge being taught until they can appreciate their close relationship with God."

b. Analysis

Analysis is an element that is already in Bloom's cognitive taxonomy. However, informants 1 and 5 said that this element must also be included in the cognitive taxonomy of Islamic education. For instance, informant 1 said:

"When someone can reach the cognitive level of analysis, they can see every situation they face positively."

c. Gratefulness

The element of gratefulness is suggested to be the highest cognitive taxonomy by informant 1. Informant 1 stated that:

"Gratefulness is the highest level in the cognitive taxonomy that someone can reach in Islamic education. We want to build a generation of students that can be grateful servants of God."

d. Habituation

This element has been stated by two informants, informants 1 and 2, respectively. Both informants stated that the ability of a person to turn knowledge into a habit is considered to be at a high cognitive level. Informant 1 defined habituation as:

“Habituation is any action that is done as a daily routine and can be shared and spread to other people.”

While informant 2 defined it as:

“Habituation reaching to an extent that the person can be emulated by others around the person.”

From both inputs, habituation needs someone to turn knowledge into an action that is done as a daily routine and can be emulated by people around us.

e. Sincerity

Sincerity is also one of the elements that is considered to have a high cognitive level in building a cognitive taxonomy for Islamic education, according to two of the informants. Informant 2 even stated that this element is even higher in cognitive level than habituation. Informant 2 described sincerity as an element of the cognitive aspect, as stated:

“Sincerity is a point when a person does not have to be forced to do an act of worship.”

Meanwhile, informant 4 described it as:

“We want the students to manifest the knowledge into practical habits in life that are sincerely done for God.”

f. Implementing

Implementation is an element suggested by three informants in developing a cognitive taxonomy for Islamic education. The emphasis on this element is what differentiates Islamic principles from Bloom's taxonomy. This is because the goal of Islamic education, according to informant 3, is to be implemented and practiced in life, not just for exams. Informant 3 emphasized this as a reason to focus on the implementation of knowledge in the student's life as an assessment of performance. Informant 4 stated that implementation can be assessed, especially in the topics regarding worshipping Allah, for example, the five daily prayers, fasting, giving charity, and reciting the Quran.

g. Consistent

Consistent is suggested by two informants as an element in building a cognitive taxonomy for Islamic education. According to informant 4, students need to manifest the values they learned in their daily lives consistently and with good manners. Meanwhile, informant 3 considered this element to be a high cognitive level to be reached by the students. This is because, according to informant 3, Islamic education does not only want to develop students who understand Islam but also those who can act upon Islam consistently.

h. Reflecting

This element has been stated by only one informant, which is informant 3. The informant stated that:

“Reflection is important for students because we do not want the students to just memorize facts about the topics, but we want the topics that have been taught to be a life lesson, and this can be achieved through my encouraging reflection.”

4.2. Discussion

There were seven themes according to the findings of the challenges in teaching Islamic education, such as lack of *adab* (values) in implementing Bloom's taxonomy, Bloom's taxonomy not appropriate for Islamic culture, Bloom's taxonomy not equivalent to the curriculum document standard and assessment, deficiency in understanding of lesson content, time constraints, deficiency of professional judgment skills, and lack of continuous assessment.

Next, the theme of lack of values in Bloom's taxonomy, as mentioned by the informants, is because Bloom divided it into three separate parts, cognitive domains, affective domains, and psychomotor domains. In contrast, in Islamic tradition, cognitive, affective, and psychomotor processes cannot be isolated [21]. Malaysia used the Bloom taxonomy as guidance to evaluate students' cognitive achievements; it is contained in the curriculum document standard and assessment in the Malaysian education system.

Bloom's taxonomy needs to be expanded to include moral development, and character education to align with the complexities of modern education goals. Educators should take responsibility for creating classroom environments where students are encouraged to critically engage with the questions of justice, equity, and responsibilities. Teachers have an important role to play in helping students develop their cognitive aspects through clearly delivering material, stimulating in-depth discussion, providing constructive

feedback, and creating an inclusive and open learning environment. By paying attention to cognitive aspects in detail, educators can design adequate learning experiences to help students understand the teachings of Islam in depth. This will help students develop greater faith, understanding, and appreciation of Islamic religious values [22].

Next, the themes of Bloom taxonomy are not equivalent to the curriculum document standard as challenges in Islamic education. The Malaysian curriculum standards for Islamic education, particularly under the national philosophy of education and the curriculum and assessment standard document (DSKP), focuses on a balanced approach that integrates cognitive, affective (moral and emotional), and psychomotor domains. Islamic education aims to build students' knowledge, skills, and values in alignment with the principles of Islam. The curriculum emphasizes not just academic learning but also the inculcation of Islamic values, ethical behavior, and spiritual growth. This creates a challenge, as the cognitive focus in Bloom's taxonomy may not fully accommodate the more affective aspects of Islamic education, such as fostering *taqwa* (God-consciousness) or *akhlak* (good character). These dimensions require an emphasis on moral reasoning and emotional intelligence, which are not explicitly addressed in Bloom's cognitive-focused taxonomy. For example, in an Islamic education classroom, a typical task might involve applying Islamic teachings to real-world scenarios. However, this application involves not just recalling facts but engaging students' ethical reasoning and emotional intelligence, which goes beyond Bloom's taxonomy's focus on cognitive application. Therefore, Bloom's model may fall short of capturing the affective and ethical dimensions that are central to Islamic education. It supports that Islamic education syllabuses in secondary and primary schools do not have a balance between the intellectual, moral, and spiritual dimensions [17].

In addition, research on artificial intelligence (AI) in line with the challenges of Bloom taxonomy lack of value. For instance, when using AI, it lacks of human emotional intelligence, lacks of ability to provide moral and ethical guidance [23]. Besides, there are also positive effect on cognitive function experience by a teacher who implement cognitive teaching approaches on online classes [24]. Generative AI also has positive impact in developing learning outcome [25].

Next, research on analyzing text book using Bloom taxonomy revealed that text book consists of remembering, understanding and applying. In contrast only have 9% of creating [26]. There are also factors affecting lower order thinking and higher order thinking on e-learning mode such as difficult to recall, lack of understanding, and not have enough example [27]. A study revealed significant differences in the distribution of lower-order thinking skills and higher-order thinking skills between primary textbooks and syllabi across disciplines. While course syllabi exhibited higher-order thinking skills more frequently than textbooks, they predominantly focused on low-order thinking skills [28].

Next, most of the teachers have time constraints and challenges similar to research [10]. They have a high workload, a large class size, and limited preparation time, and they also feel pressure to meet the standards. Teachers need to manage their time and have a passion for teaching [29]. Besides, for the professional consideration theme, teachers should not be careless in awarding marks. There are cases of hesitation among teachers in awarding marks just because they cannot make the right decision, which results in a poor opportunity for students to succeed in their studies. Meanwhile, the theme of continuous assessment also becomes a challenge for teachers due to peer and parent pressure. Thus, teachers only evaluate cognitively.

The novelty of this research lies in several key contributions. First is identification of a new challenge. The research highlights a previously unexplored challenge in teaching Islamic education using Bloom's taxonomy - professional judgment and the lack of continuous assessment. This adds to the existing seven challenges found in previous literature. Secondly, introduction of new elements in the framework. The study proposes two new elements - gratefulness and sincerity to be included in the Islamic cognitive domains, extending the conceptualization of Bloom's taxonomy within the Islamic educational context. Third, development of the Islamic cognitive domain. The research suggests a development path for the Islamic cognitive domain which addresses the evolving needs of both learners and educators. The fourth is cultural focus. The research is specifically limited to the Islamic cultural context, offering a focused approach to adapting Bloom's taxonomy to this setting, laying the groundwork for future studies that may apply or extend these ideas across different cultural or educational frameworks. These elements of novelty underscore the research's contribution to both the understanding and evolution of Islamic education, as well as its implications for pedagogical practices.

5. CONCLUSION

Bloom's taxonomy is widely used for evaluation and assessment. Islamic education, it needs to be more detailed and take into account the combination or integration between the cognitive, effective, and psychomotor domains. The application of Bloom's taxonomy has long been applied in schools, but there are improvements in Islamic education to produce holistic students. All challenges in educating these students

need to be addressed and overcome wisely by the teacher. Teachers need to be creative and can design their lessons to solve the problems that they face. Given these challenges, there is a need for the construction of a special taxonomy for the field of Islamic education. Identification of a new challenge, introduction of new elements in the framework, development of the Islamic cognitive domain, and cultural focus have been highlighted as key contributions in this research. The suggested cognitive domain that emerged from the findings can serve as a reference to construct a proper taxonomy for Islamic education in the future. The limitation of this study is that it uses a qualitative study. Future studies can use a quantitative method instead. This study also uses a sample of excellent Islamic education teachers. It is suggested for future studies to conduct the research with Islamic education teachers and students.

FUNDING INFORMATION

We would like to thank Ministry of Higher Education for providing the funds under the Grant Number: FRGS/1/2022/SS10/UKM/01/1 and Universiti Kebangsaan Malaysia for helping to do the research and research Grant GP-K019312.

AUTHOR CONTRIBUTIONS STATEMENT

This journal uses the Contributor Roles Taxonomy (CRediT) to recognize individual author contributions, reduce authorship disputes, and facilitate collaboration.

Name of Author	C	M	So	Va	Fo	I	R	D	O	E	Vi	Su	P	Fu
Hafizhah Zulkifli	✓	✓			✓	✓	✓		✓	✓		✓	✓	✓
Ahmad Munawar Ismail		✓			✓	✓			✓					
Nurul Asiah Fasehah Muhamad	✓			✓	✓	✓				✓	✓			
Nur Hanani Hussin	✓	✓			✓		✓		✓	✓				
Hifdzi Zaim Zamri	✓	✓	✓			✓		✓		✓		✓		

C : Conceptualization

M : Methodology

So : Software

Va : Validation

Fo : Formal analysis

I : Investigation

R : Resources

D : Data Curation

O : Writing - Original Draft

E : Writing - Review & Editing

Vi : Visualization

Su : Supervision

P : Project administration

Fu : Funding acquisition

CONFLICT OF INTEREST STATEMENT

The authors declare that they have no known competing financial interests or personal relationships that could have appeared to influence the work reported in this paper.

INFORMED CONSENT

All participant had signed the informed consent to participate in the study.

ETHICAL APPROVAL

All participants provided informed consent to participate in the study and the data use pseudonym.

DATA AVAILABILITY

The data that support the findings of this study are available on request from the corresponding author [HZ]. The data, which contain information that could compromise the privacy of research participants, are not publicly available due to certain restrictions. Derived data supporting the findings of this study are available from the corresponding author [HZ], on request.

REFERENCES

- [1] D. Kundisch *et al.*, "An Update for Taxonomy Designers," *Business & Information Systems Engineering*, vol. 64, no. 4, pp. 421–439, Aug. 2022, doi: 10.1007/s12599-021-00723-x.
- [2] B. McKelvey, *Organizational systematics: Taxonomy, evolution, classification*. Berkeley, CA: University of California Press, 2022.
- [3] E. Roach and B. B. Lloy, *Cognition and categorization*. New York: Taylor & Francis, 2024.
- [4] M. Muslih, "Taxonomy of spiritual quotient learning outcomes: An insight from tasawwuf perspective," *AMCA Journal of Religion and Society*, vol. 1, no. 2, pp. 25–32, Sep. 2021, doi: 10.51773/ajrs.v1i2.81.
- [5] C. Fraser, "Mathematics in Library and Review Classification Systems: An Historical Overview," *KO Knowledge Organization*, vol. 47, no. 4, pp. 334–356, 2020, doi: 10.5771/0943-7444-2020-4-334.
- [6] J. B. Biggs and K. F. Collis, *Evaluating the Quality of Learning: The SOLO Taxonomy (Structure of the Observed Learning Outcome)*. New York: Academic Press, 2014.
- [7] Suyadi, "Learning Taxonomy of Islamic Education: The Development of Aql and the Brain in Quran from a Neuroscience Perspective," *Millah: Journal of Religious Studies*, vol. 21, no. 2, pp. 361–410, Jul. 2022, doi: 10.20885/millah.vol21.iss2.art3.
- [8] L. Shoukat and M. Waheed, "Cognitive and Affective Domains in the Light of the Holy Quran: An Analytical Discussion of Educational Process in Pakistan," *International Research Journal on Islamic Studies (IRJIS)*, vol. 3, no. 2, pp. 88–101, 2021, doi: 10.54262/irjis.03.02.e07.
- [9] M. F. Fanani, N. E. Nuzula, and A. F. Gunawan, "Analysis of the Readiness of Islamic Religious Education Teachers in Implementing the Independent Curriculum in Middle Schools," *JISIP (Jurnal Ilmu Sosial dan Pendidikan)*, vol. 8, no. 3, p. 1854, Jul. 2024, doi: 10.58258/jisip.v8i3.7170.
- [10] S. F. Osman, M. T. Ajmain@Jima'ain, F. Awae, S. N. H. A. Rahman, M. D. H. D. Malek, and S. Aripin, "Teaching Practices of Islamic Education Teachers in Improving Critical Thinking of Rural Students." Research Square (Preprint), Jan. 30, 2024, doi: 10.21203/rs.3.rs-3861833/v1.
- [11] A. R. Villano-AC, "Non-Specialized Teachers Handling Major Subjects," *International Journal of Advanced Multidisciplinary Studies (IJAMS)*, vol. 4, no. 5, pp. 203–215, 2024.
- [12] B. J. Bunt, M. Grosser, and D. van Tonder, "A Novel Proposal to Use Thinking Maps to Embed Blooms' Taxonomy Within Teaching, Learning, and Assessment," *Journal of Cognitive Education and Psychology*, vol. 21, no. 2, Aug. 2022, doi: 10.1891/JCEP-2021-0030.
- [13] B. A. Al-Harbi, "The Attitudes of Islamic Education Teachers Towards the Use of Social Media in Teaching and Learning," *International Education Studies*, vol. 12, no. 11, p. 154, Oct. 2019, doi: 10.5539/ies.v12n11p154.
- [14] K. Uiboleht, M. Karm, and L. Postareff, "The interplay between teachers' approaches to teaching, students' approaches to learning and learning outcomes: a qualitative multi-case study," *Learning Environments Research*, vol. 21, no. 3, pp. 321–347, Oct. 2018, doi: 10.1007/s10984-018-9257-1.
- [15] N. A. Rone *et al.*, "Students' Lack of Interest, Motivation in Learning, and Classroom Participation: How to Motivate Them?" *Psychology and Education: A Multidisciplinary Journal*, vol. 7, no. 8, pp. 636–646, 2023.
- [16] D. Puspasari and J. Muyassaroh, "The Effect of Learning Motivation and Learning Discipline on Student Learning Achievement," *Scaffolding: Jurnal Pendidikan Islam dan Multikulturalisme*, vol. 5, no. 2, pp. 110–126, May 2023, doi: 10.37680/scaffolding.v5i2.2778.
- [17] R. Hashim, "The Islamic Studies education curriculum of Malaysian national schools: A study of its philosophy and content," in *Rethinking Madrasah Education in a Globalised World*, 1st ed., M. A. Bakar, Ed. London: Routledge, 2017, pp. 174–189.
- [18] Y. C. Tie, M. Birks, and K. Francis, "Grounded theory research: A design framework for novice researchers," *SAGE Open Medicine*, vol. 7, pp. 1–8, Jan. 2019, doi: 10.1177/2050312118822927.
- [19] A. Shoozan and M. Mohamad, "Application of Interview Protocol Refinement Framework in Systematically Developing and Refining a Semi-structured Interview Protocol," *SHS Web of Conferences*, vol. 182, p. 04006, Feb. 2024, doi: 10.1051/shsconf/202418204006.
- [20] V. Braun and V. Clarke, "Can I use TA? Should I use TA? Should I not use TA? Comparing reflexive thematic analysis and other pattern-based qualitative analytic approaches," *Counselling and Psychotherapy Research*, vol. 21, no. 1, pp. 37–47, Mar. 2021, doi: 10.1002/capr.12360.
- [21] D. Ilham, "Challenge of Islamic Education and How to Change," *International Journal of Asian Education*, vol. 1, no. 1, pp. 9–20, Jun. 2020, doi: 10.46966/ijae.v1i1.16.
- [22] A. Gyagenda, "Application of Bloom's Taxonomy in the Instruction of Islamic Education," *Interdisciplinary Journal of Education*, vol. 6, no. 1, pp. 29–39, May 2023, doi: 10.53449/ije.v6i1.222.
- [23] A. Nirwana AN *et al.*, "SWOT Analysis of AI Integration in Islamic Education: Cognitive, Affective, and Psychomotor Impacts," *Qubahan Academic Journal*, vol. 5, no. 1, pp. 476–503, Mar. 2025, doi: 10.48161/qaj.v5n1a1498.
- [24] M. Madkour and H. Alaskar, "Exploring Cognitive Teaching Approaches for Inclusive Translation Online Classes: A Case Study During the COVID-19 Pandemic," *Theory and Practice in Language Studies*, vol. 14, no. 4, pp. 1219–1230, Apr. 2024, doi: 10.17507/tpls.1404.29.
- [25] O. Almatrafi and A. Johri, "Leveraging generative AI for course learning outcome categorization using Bloom's taxonomy," *Computers and Education: Artificial Intelligence*, vol. 8, p. 100404, Jun. 2025, doi: 10.1016/j.caeai.2025.100404.
- [26] G. A. Mahardhika, Y. Wirza, F. R. Al-Kahfi, and A. D. Mababaya, "Analyzing HOTS Labeled Questions in An EFL Fifth Grade Elementary School Textbook," *IJELTAL (Indonesian Journal of English Language Teaching and Applied Linguistics)*, vol. 10, no. 1, pp. 165–183, May 2025, doi: 10.21093/ijeltal.v10i1.1983.
- [27] F. Ş. F. Kınık and A. K. Sarıkaya, "Online learning at the post-graduate level: Interpretations through Bloom's revised taxonomy," *Turkish Journal of Education*, vol. 14, no. 1, pp. 67–92, Jan. 2025, doi: 10.19128/turje.1454562.
- [28] B. Khoy, "Unlocking cognitive learning objectives: a comprehensive evaluation of how textbooks and syllabi align with revised Bloom's taxonomy across disciplines," *Curriculum Perspectives*, pp. 1–14, Jan. 2025, doi: 10.1007/s41297-024-00295-2.
- [29] H. P. Bui and T. T. T. Nguyen, "Classroom assessment and learning motivation: insights from secondary school EFL classrooms," *International Review of Applied Linguistics in Language Teaching*, vol. 62, no. 2, pp. 275–300, Jun. 2024, doi: 10.1515/iral-2022-0020.

BIOGRAPHIES OF AUTHORS



Hafizhah Zulkifli    earned her bachelor's and master's degrees in Islamic Education from Universiti Kebangsaan Malaysia, Selangor, in 2008 and 2011, respectively. She completed her Ph.D. in Islamic education at the International Islamic University Malaysia (IIUM) in 2019. She is currently a lecturer at Universiti Kebangsaan Malaysia, Selangor, and has authored or co-authored over 30 academic articles. Her research interests include the philosophy of education for children, known as Hikmah (wisdom) pedagogy, as well as moral and Islamic education. Presently, she is focused on developing educational materials that are more aligned with Malaysian and Islamic cultural and traditional contexts. She can be contacted at email: hafizhah_zulkifli@ukm.edu.my.



Ahmad Munawar Ismail    started his career as a lecturer at UKM (2007-2021) and currently serves as deputy dean (research and innovation), Faculty of Islamic Studies, UKM. He has 20 years of progressive teaching and research experience at national and international levels. The candidate's areas of expertise, research, and publication are in the fields of Islamic creed, Islamic education, and research methods of Islamic studies. He was a Fulbright scholar and holds a Doctor of Education degree from UKM. He can be contacted at email: munawar@ukm.edu.my.



Nurul Asiah Fasehah Muhamad    has served 11 years as a lecturer at the Faculty of Quran and Sunnah Studies (FQSS), Universiti Sains Islam Malaysia (USIM). She holds a bachelor's degree in Islamic Revelation and Heritage (Quran Sunnah) from the International Islamic University of Malaysia (UIAM), a master's degree in Islamic Revelation and Heritage (Quran Sunnah) from IIUM and a Doctorate of Philosophy (Ph.D.) in Islamic Education from the National University of Malaysia (SMEs). Her areas of expertise are Islamic education, teacher professionalism through the framework of the Quran and Sunnah and Quran and Sunnah education for the disabled. She can be contacted at email: nurulasiahfasehah@usim.edu.my.



Nur Hanani Hussin    is an officer in the Islamic Education Division, Ministry of Education Malaysia. She obtained a Doctor of Philosophy Degree at the National University of Malaysia in the field of Education. Her area of expertise is Islamic Education. She can be contacted at email: hanani.hussin@moe.gov.my.



Hifdzi Zaim Zamri    is a candidate for a doctor of philosophy at Hadhari Islamic Institution, Universiti Kebangsaan Malaysia. He has a bachelor's degree in science (geology) with honors and a master's degree in Islamic civilization. The focus of his research is on Islamic science integration education and scientific interpretation. He can be contacted at email: hifdzizaim06@gmail.com.